



AF/IRL

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : William Bowden et al.
Serial No. : 10/648,801
Filed : August 27, 2003
Title : PRIMARY LITHIUM BATTERY

Art Unit : 1745
Examiner : Raymond Alejandro
Conf. No. : 3936

Mail Stop Appeal Brief - Patents

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**REPLY BRIEF FILED IN RESPONSE TO
EXAMINER'S ANSWER MAILED MAY 31, 2007**

Applicants are responding to the Examiner's Answer mailed on May 31, 2007. This Reply Brief includes the same substantive arguments as the Rely Brief submitted on February 13, 2007.

The Examiner contends that the specification "fails to provide specific direction for ascertaining the definition, scope, and implication of the terms 'mixture' and 'blend'." See Examiner's Answer at 10. Based on this, the Examiner interprets a "mixture" and "blend" of carbon fluoride and lithiated manganese dioxide sufficiently broad to encompass, for example, a cathode including a first layer including carbon fluoride and a second layer including lithiated manganese dioxide.

But the specification does provide specific "direction" concerning the meaning of mixture, in particular, and the Examiner's boundless interpretation of mixture is inconsistent with that direction. For the convenience of the Board, applicants will walk through the specific guidance provided in the specification.

Applicants provide an example of a battery covered by claim 25 in Figure 1:

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit

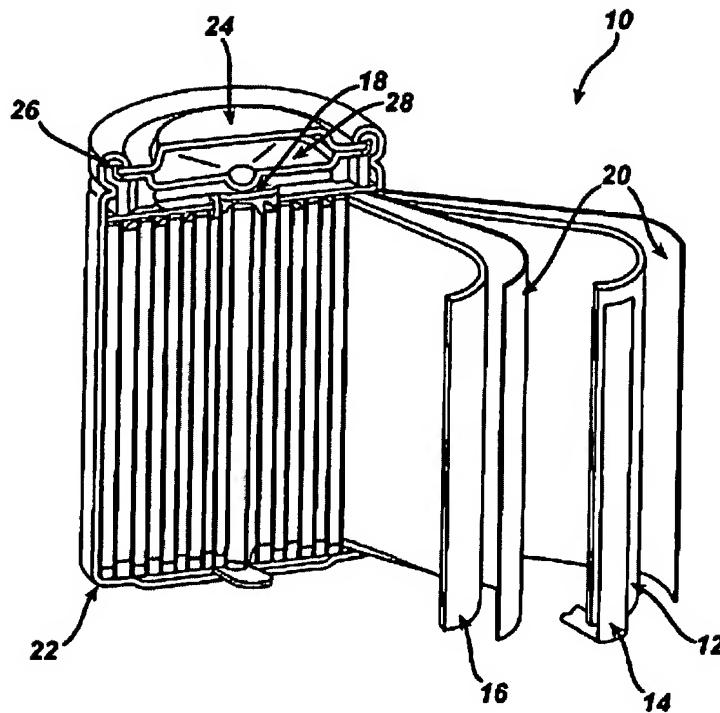
June 12, 2007

Signature

Sherry L. Hunt

Typed or Printed Name of Person Signing Certificate

FIG. 1



Primary lithium battery 10 includes a cathode 16. As is apparent from Figure 1, cathode 16 is a single layer.

Applicants later provide examples of compositions used in cathode 16 (page 11 of specification):

Lithium cells containing a cathode mixture of 60% active material, 30% graphite conductive diluent and 10% poly(tetrafluoroethylene) binder were prepared. The cathode active materials tested were CF_x , heat treated EMD, lithiated manganese dioxide (LiMD), a 50:50 mixture (by weight) of CF_x and heat treated EMD, or a 50:50 mixture (by weight) of CF_x and lithiated manganese dioxide.

There are five cathodes compositions discussed in this quoted passage. One of the compositions includes a carbon fluoride (CF_x) and lithiated manganese dioxide and is within the scope of claim 25; the others are comparative examples.

Significantly, the examples refer to a "cathode mixture" including the "active material," a "conductive diluent," and a "binder." The binder is present to hold (bind) the other components together. The "active materials" listed include a 50:50 mixture (by weight) of CF_x and lithiated

manganese dioxide.” Plainly, and consistent with the unitary cathode 16 illustrated in Figure 1, the cathode “mixture” is a physical mixture of the components.

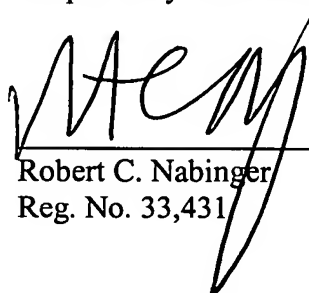
An Examiner, in interpreting claim language during prosecution, can adopt “the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant’s specification.” In re Morris, 127 F.3d 1048, 1054 (Fed. Cir. 1997). The Examiner’s interpretation of “mixture” is not reasonable because it is not consistent with the specification.

Applicants focused this appeal on claim 25 because that claim also states that “the lithiated manganese dioxide and the carbon fluoride are blended.” The Examiner at one point appears to contend that this is a product-by-process limitation that does not count as a claim limitation for purposes of distinguishing the prior art. See Examiner’s Answer at 5. But blending is simply a way of providing a physical mixture of materials. Thus, the “the lithiated manganese dioxide and the carbon fluoride are blended” limitation further supports applicant’s interpretation of “mixture.”

The 35 U.S.C. § 102 rejection should be reversed for the reasons explained in the Brief on Appeal.

For these reasons, and the reasons stated in the Appeal Brief, Applicant submits that the final rejection should be reversed.

Respectfully submitted,



Robert C. Nabinger
Reg. No. 33,431

Date: June 12, 2007

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906